5

10

Abstract of the Disclosure

A method and system for identifying and configuring device-enhanced memory modules at system startup is described. A driver is described that performs a wakeup procedure at startup to identify installed device-enhanced memory modules, detect memory implementations such as interleaving and striping on memory modules, detect error detection and correction (ECC) implementations, and to configure the identified device-enhanced memory modules to use the detected implementations. The method may include several phases including, but not limited to, a start block phase, an ECC configuration phase, an ECC check phase, an interleave detect and configuration phase, a buffer check phase, and a final configuration phase. One or more of the phases may be performed at system startup and/or during normal system operation. Methods for shutting down and providing a sleep mode for device-enhanced memory modules are also described.